

Work Order ID 146589

Thursday, May 19, 2016 2:56:09 PM

146589

Page 1

Item ID: D205-665-019

Revision ID:

Item Name: Cable Guard

Start Date: 5/27/2016 Start Qty: 1.00

Required Date: 6/8/2016 Req'd Qty: 1.00

Reference:

Accept

N900040100

Setup Start ***NS1***

Stop ***NS2***

Cust Item ID:

Customer:

Approvals:

Process Plan: MCJ

Date: MAY 24 2016

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D205-665	G								
100	Document Control	0.00	DAS 6 9-89					DAS 21 9-89 1607-12	
100									
DC	Memo	0.00							
Doc.Control -USB or Paperwork	PHOTOCOPY BLUE FILE AND CREATE LABELS AS PER PPPD205-665-019 CHG001								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.03							
Quality Control									

JUL 18 2016

JUL 14 2016

JUL 18 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																	
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Page 2

Item ID: D205-665-019 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Cable Guard
 Start Date: 5/27/2016 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 6/8/2016 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00				4	DAS 27		
130							9-89		
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D205-665-019								
	Location: _____								
	PPP Rev: _____								
	fs 120A								
140	QC21- Final Inspection - Work Order Release	0.00							
140							DAS 21		
QC	Memo	0.10					9-89		
Quality Control									

JUL 1 8 2016

JUL 1 8 2016

DAS
21
9-89 JUL 1 8 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

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Date : _____		Step #: _____		QTY Effective : _____			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
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Picklist Print

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Parent Item: D205-665-019

D205-665-019

Parent Item Name: Cable Guard

Start Date: 5/27/2016

Required Date: 6/8/2016

Start Qty: 1.00

Required Qty: 1.00

AN4-50A

Purchased

No

110

Each

10.0000

1

24

PL



AN4-50A

Bolt

DAS
27
9-89

Location

Loc Qty

Loc Code

ST340

10

m133694

10

MS21042L4

Purchased

No

110

Each

2,035.000

5

5 20

X20134 955 PL



MS21042L4

Locknut

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

187

m133769

187

OVER007

1500

m134676

500

m134762

1000

ST303

251

m134606

251

ST305

97

m130922

97

JUL 14 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																															
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PARTS LIST

REFERENCE ONLY

QTY -011	QTY -013	QTY -015	QTY -017	QTY -019	PART NUMBER	DESCRIPTION
X					D205-665-011	CABLE GUARD INSTALLATION
	X				D205-665-013	CABLE GUARD INSTALLATION
		X			D205-665-015	CABLE GUARD INSTALLATION
			X		D205-665-017	CABLE GUARD INSTALLATION
				X	D205-665-019	CABLE GUARD INSTALLATION
1					D2886-1	GUARD
	1				D2886-3	GUARD
			1		D3990-1	GUARD
		1			D2916-1	GUARD
		1			D2916-3	GUARD
		1			D2916-5	GUARD
		1			D2916-7	GUARD
		4			D2915	BUSHING
1		2	1		D2529	WASHER
6	6	8	2	10	D2570	BUSHING
				1	D4445-1	GUARD
				1	D4506-1	WASHER
4	3	4	2	4	AN4-47A	BOLT
				1	AN4-50A	
		4			AN4-55A	BOLT
4	3	8	2	5	MS21042L4 (OR -4)	NUT
1		2	1		NAS1149D0463J	WASHER (OR AN960JD416)

WEIGHT AND BALANCE

Installation	Weight	Longitudinal	
		Arm	Moment
D205-665-011	2.22 lb 1.01 kg	145.2 in 3.69 m	322 in-lb 3.73 m-kG
D205-665-013	2.20 lb 1.00 kg	101.7 in 2.58 m	224 in-lb 2.58 m-kG
D205-665-015	6.96 lb 3.16 kg	117.2 in 2.97 m	816 in-lb 9.40 m-kG
D205-665-017	0.70 lb 0.32 kg	68.5 in 1.74 m	48 in-lb 0.56 m-kG
D205-665-019	4.81 lb 2.18 kg	118.7 in 3.01 m	571 in-lb 6.56 m-kG

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: MSH
D. SHEPHERD (DE # 02)

DATE: 12.04.25
CERT. NO.: SH96-88
ISSUE NO.: 3

DESIGN	<u>DE</u>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	DRAWING NO. D205-665	REV. G SHEET 3 OF 10
DRAWN	<u>DE</u>			
CHECKED	<u>DE</u>			
MFG. APPR.	N/A			
APPROVED	<u>MSH</u>	TITLE CABLE GUARD INSTALLATION		
DE APPR.	<u>MSH</u>	SCALE NTS		
DATE 12.04.25		COPYRIGHT © 1999 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		